## Michigan Technological University Minor in Computer Science

Program Code SCSM, Academic Year 2021-22

College of Computing

Total Credits Required: 18

## **Required Courses**

Course	Credits
CS 1142 Programming at HW/SW Interface Prereq-CS1122/1132	3
CS 2311 Discrete Structures <b>or</b> MA 3210 Combinatorics <i>Prereq-(CS1122 or CS1131) and (MA1135 or MA1160 or MA1161)</i>	3
CS 2321 Data Structures Prereq-CS1122 or CS1131	3
CS 3141 Team Software Project Prereq-CS2311 or MA3210 and CS2321	3

## **Elective Courses: Select 6 credits from the following**

Course	Credits
CS 3311 Formal Models of Computation Prereq-CS2311 Discrete Structure or MA3210 Combinatorics	3
CS 3331 Concurrent Computing Prereq-CS1142 or (CS1141 & CS1040) & (CS2311 or MA3210) & CS2321	3
CS 3411 Systems Programming Prereq-CS3421 Computer Organization	3
CS 3421 Computer Organization Prereq-CS1141 & CS1040 or CS1142 Prog at HW/SW Interface	3
CS 3425 Intro to Database Systems Prereq- (CS2311 Discrete Structures or MA3210 Combinatorics) & CS2321 Data Structures	3
CS 3712 Software Quality Assurance Prereq-CS3141 Team Software Project	3
CS 4130 Compiler Design and Optimization Prereq-CS4121 Programming Languages	3
CS 4321 Intro to Algorithms Prereq-(CS2311 Discrete Structures or MA3210 Combinatorics) & CS2321 Data Structures	3
CS 4611 Computer Graphics Prereq-CS1141 or CS1142 & CS2321 & MA2330	3
CS 4710 Model-Driven Software Dev. Prereq-CS3311 Formal Models of Computation & CS3141	3
CS 4711 Software Processes and Mgmt Prereq-CS3141 Team Software Project	3
CS 4760 Human-Computer Interactions Prereq-CS3141 Team Software Project	3
CS 4811 Artificial Intelligence Prereq-(CS2321 Data Structures and MA3210 Combinatorics) & CS3311 Formal Models of Cmptn	3
CS 4821 Data Mining Prereq-[CS3425 or MIS3100] & MA2330 or MA 2320 or MA2320 or MA2321 & MA2710 or MA2720 or MA3710	3